SEARCH REQUEST FORM

Scientific and Technical Information Center

3	cientific and Technic	cal Information Center .			
Requester's Full Name: Phone Mail Box and Bldg/Room Location	Number 30 5 - 357 on: Cp3 5Bab Re	Examiner #: 6040 Date: 27 Serial Number: 09 1899 of esults Format Preferred (circle): PAPER I	6/02 90 DISK E-MAIL		
If more than one search is submitted, please prioritize searches in order of need.					
Please provide a detailed statement of the Include the elected species or structures,	e search topic, and describ keywords, synonyms, acr s that may have a special i	be as specifically as possible the subject matter to onyms, and registry numbers, and combine with the meaning. Give examples or relevant citations, au	be searched.		
Title of Invention:			•		
			٠.		
Earliest Priority Filing Date:					
For Sequence Searches Only Please inclu	ide all pertinent information	r (parent, child, divisional, or issued patent numbers)	along with the		
appropriate serial number.					
1	,				
. +	+				
}	Malana				
	5,	919,507			
	,				
		· .			
	•				
		·			
:					
1					
NoLitigation ?	reported				
STAFF USE ONLY	Type of Search	Vendors and cost where applicable	****** e		
Searcher: Mellerson	NA Sequence (#)	STN			
Searcher Phone #: $8 - 46$	AA Sequence (#)	Dialog			
Searcher Location: CK3/4 3D/6 2	Structure (#)	Questel/Orbit 22.13	<u> </u>		
Date Searcher Picked Up:	Bibliographic	Dr.Link			
Date Completed: 816	Litigation	Lexis/Nexis 40.00			
Searcher Prep & Review Time:	Fulltext	Sequence Systems			
Clerical Prep Time:	Patent Family	WWW/Internet			

PTO-1590 (8-01)

Current session 06/08/2002

(C) OUESTEL 1994

QUESTEL.ORBIT (TM) 1998

06/08/02 16*36*50

Last connection: 02/08/02 17*15*32

WELCOME to QUESTEL.ORBIT- Your Guide to INTELLECTUAL PROPERTY www.questel.orbit.com - Gateway, documentation & IP resource

- New Family displays w LEGAL option, etc.: INFO NEWS-PLUSPAT
- PlusPat Family w Legal Status in ONE record INFO MFAMSTAT
- Now 9 million Images w PlusPat displays INFO IMG-PLUSPAT
- Latest EP, WO & US Applications in One Alert: INFO APPALERT
- New Trademark file names, format & fields INFO COMPU-MARK
- EPAPAT contains all unique EPTEXT data. EPTEXT file removed
- New Patent Citation Commands: easy & precise INFO PATCITE
- USAPPS Reloaded: Pricing, see INFO USAPPS
- ..FILE / :.INFO / ..GUIDE

Query/Command: file pluspat

INPADOC - Time in minutes: 0,14

The cost estimation below is based on Questel's

standard price list

Estimated cost: 0.15 USD

Cost estimated for the last database search: 0.15 USD

Estimated total session cost : 1.13 USD

Selected file: PLUSPAT

PLUSPAT - (c) Questel-Orbit, All Rights Reserved.

Comprehensive Worldwide Patents database

New Patent Citation Commands & FAM Citation Report - see INFO PATCITE

Last update of file: 2002/07/31 (YYYY/MM/DD) 2002-30/UP (basic update)

Search statement 1

Query/Command: us5919507/pn

** SS 1: Results 1

Search statement

Query/Command: prt full nonstop legalall

1/1 PLUSPAT - ©QUESTEL-ORBIT - image

PN - US5919507 A 19990706 [US5919507]

TI - (A) Preservation compositions and methods for mushrooms

PA - (A) PENN STATE RES FOUND (US)

IN - (A) BEELMAN ROBERT B (US); DUNCAN ERIC M (US)

AP - US12090598 19980722 [1998US-0120905]

PR - US6067097P 19971002 [1997US-P060670] US12090598 19980722 [1998US-0120905]

IC - (A) A23L-003/34

EC - A23B-007/04K

A23B-007/10 A23B-007/154 A23B-007/157

PCL - ORIGINAL (O): 426268000; CROSS-REFERENCE (X): 426303000 426310000 426335000 426615000

DT - Corresponding document

CT - US3718482; US4066795; US4814192; US4959483; US5055313

STG - (A) United States patent

AB - Preservative compositions using toxicologically acceptable ingredients, and employing a pH of 9.0 or above for at least part of the process, for controlling the growth of spoilage bacteria and for preventing unwanted color changes in fresh and processed mushrooms. Aqueous solutions of preservatives are prepared and applied in multiple stages to the mushrooms, by spraying or immersion. More specifically, disclosed is a method for preserving fresh and processed mushrooms, comprising the steps of: contacting the mushrooms with an antimicrobial buffer solution having a pH of from about 9.5 to about 11.0; and rinsing the mushrooms one or more times immediately after the contacting step with pH-neutralizing buffer solutions of erythorbic acid and sodium erythorbate, in ratios of about 1:4, with a sufficient pH to return the mushrooms to the mushroom physiological pH of about 6.5.

1/1 LGST - ©LEGSTAT

PN - US 5919507 [US5919507]

AP - US 120905/98 19980722 [1998US-0120905]

DT - US-P

ACT - 19980722 US/AE-A

APPLICATION DATA (PATENT)

US 120905/98 19980722 [1998US-0120905]

19980722 US/AS02

ASSIGNMENT OF ASSIGNOR'S INTEREST PENN STATE RESEARCH FOUNDATION, THE 304 OLD MAIN UNIVERSITY PARK, PENNSYLVANIA 1 * BEELMAN, ROBERT B. : 19980630; DUNCAN, ERIC M. : 19980630

19990706 US/A PATENT

UP - 2000-08

Query/Command: file inpadoc

PLUSPAT - Time in minutes: 0,56 The cost estimation below is based on Questo standard price list	el's		
Estimated cost Records displayed and billed : 1	:	1.23	USD
Estimated cost Cost estimated for the last database search Estimated total session cost			USD
LGST - Time in minutes: 0,05 The cost estimation below is based on Questo standard price list			
Records displayed and billed : 1	:	0.05	USD
Estimated cost Legal-Status informations : 1	:	0.57	USD
Estimated cost Cost estimated for the last database search			
Estimated total session cost	:	9.00	
CRXX - Time in minutes: 0,01 The cost estimation below is based on Questo standard price list	el's		
Estimated cost Cost estimated for the last database search Estimated total session cost		0.01 0.01 9.01	USD
PAST - Time in minutes: 0,01 The cost estimation below is based on Questo standard price list			
Estimated cost		0.01	
Cost estimated for the last database search		0.01	
Estimated total session cost	:	9.02	บรม
LITA - Time in minutes: 0,01 The cost estimation below is based on Questo standard price list	el's		
Estimated cost	:	0.01	USD
Cost estimated for the last database search	:	0.01	USD
Estimated total session cost	•	9.03	USD
Selected file: INPADOC			
Search statement 1			

Query/Command: fam us5919507/pn

1 Patent Groups

** SS 1: Results 9

Search statement

Query/Command: famstate nonstop

1/9 INPADOC - ©INPADOC

PN - AT 211619 E 20020115 [ATE211619]

TI - VERFAHREN ZUR KONSERVIERUNG VON PILZEN

IN - BEELMAN ROBERT B [US]; DUNCAN ERIC M [US]

PA - PENN STATE RES FOUND [US]

AP - AT 98950857/98-EP 19981002 [1998EP-0950857]

PR - US 60670/97-P 19971002 [1997US-P060670] US 120905/98-A 19980722 [1998US-0120905]

WO 9820728/98(US)-W 19981002 [1998WO-US20728]

IC - A23B-007/04; A23B-007/10; A23B-007/154; A23B-007/157

1/2 LEGALI - ©LEGSTAT

PN - AT 211619 [ATE211619]

DT - AT-R

ACTE - 20020715 AT/RER [-]

CEASED AS TO PARAGRAPH 5 LIT. 3 LAW INTRODUCING PATENT

TREATIES

UP - 2002-30

2/2 LEGALI - ©LEGSTAT

PN - EP 983004 [EP-983004]

AP - EP 98950857/98 19981002 [1998EP-0950857]

DT - EP-P

ACTE - 19981002 EP/AE-A

EP-APPLICATION

EP 98950857/98 19981002 [1998EP-0950857]

20000308 EP/AK-A1 [+]

DESIGNATED CONTRACTING STATES IN AN APPLICATION WITH SEARCH REPORT:

AT BE CH CY DE DK ES FI FR GB GR IE IT LI LU MC NL PT SE

20000308 EP/AK-A4 [+]

DESIGNATED CONTRACTING STATES MENTIONED IN A

SUPPLEMENTARY SEARCH REPORT: AT BE CH CY DE DK ES FI FR GB GR IE IT LI LU MC NL PT SE

20000308 EP/A1 [+]
PUBLICATION OF APPLICATION WITH SEARCH REPORT

20000308 EP/A4 [+] SUPPLEMENTARY SEARCH REPORT 20000111

20000308 EP/17P [+] REQUEST FOR EXAMINATION FILED 19991220

20010404 EP/RTI1 TITLE (CORRECTION) METHOD FOR PRESERVING MUSHROOMS

20010425 EP/RTI1 TITLE (CORRECTION) METHOD FOR PRESERVING MUSHROOMS

20010516 EP/RTI1 TITLE (CORRECTION) METHOD FOR PRESERVING MUSHROOMS

20010711 EP/17Q [+] FIRST EXAMINATION REPORT 20010525

20020101 EP/REG; GB/IF02 [+]
GB: EUROPEAN PATENT IN FORCE AS OF 2002-01-01
<GB>

20020102 EP/RIC1 CLASSIFICATION (CORRECTION) 7A 23B 7/04 A, 7A 23B 7/10 B, 7A 23B 7/154 B, 7A 23B 7/157 B

20020102 EP/RIN1 INVENTOR (CORRECTION) BEELMAN, ROBERT B. * DUNCAN, ERIC M.

20020109 EP/AK-B1 [+]
DESIGNATED CONTRACTING STATES MENTIONED IN A PATENT SPECIFICATION:
AT BE CH CY DE DK ES FI FR GB GR IE IT LI LU MC NL PT SE

20020109 EP/B1 [+] PATENT SPECIFICATION

20020109 EP/REF-R [+]
IN AUSTRIA REGISTERED AS:
(AT 211619 20020115 [ATE211619])

20020115 EP/REG; CH/EP [+] CH: ENTRY IN THE NATIONAL PHASE <CH>

20020206 EP/REG; IE/FG4D

IE: EUROPEAN PATENTS GRANTED DESIGNATING IRELAND <IE>

20020228 EP/REF-P CORRESPONDS TO: (DE 69803453 20020228 [DE69803453])

20020715 EP/REG; CH/PL [-] CH: PATENT CEASED

<CH>

UP - 2002-29

2/9 INPADOC - ©INPADOC

PN - AU 732529 B2 20010426 [AU-732529]

TI - PRESERVATIVE COMPOSITIONS AND METHODS FOR MUSHROOMS

IN - BEELMAN ROBERT B; DUNCAN ERIC M

PA - PENN STATE RES FOUND

AP - AU 96791/98-A 19981002 [1998AU-0096791]

PR - US 60670/97-P 19971002 [1997US-P060670] US 120905/98-A 19980722 [1998US-0120905] WO 9820728/98(US)-W 19981002 [1998WO-US20728]

IC - A23L-003/34

3/9 INPADOC - ©INPADOC

PN - AU 96791/98 A1 19990427 [AU9896791]

TI - PRESERVATIVE COMPOSITIONS AND METHODS FOR MUSHROOMS

IN - BEELMAN ROBERT B; DUNCAN ERIC M

PA - PENN STATE RES FOUND

AP - AU 96791/98-A 19981002 [1998AU-0096791]

PR - US 60670/97-P 19971002 [1997US-P060670] US 120905/98-A 19980722 [1998US-0120905]

WO 9820728/98(US)-W 19981002 [1998WO-US20728]

IC - A23L-003/34

4/9 INPADOC - ©INPADOC

PN - DE 69803453 C0 20020228 [DE69803453]

TI - VERFAHREN ZUR KONSERVIERUNG VON PILZEN

IN - BEELMAN ROBERT B [US]; DUNCAN ERIC M [US]

PA - PENN STATE RES FOUNDATION UNIV [US]

AP - DE 69803453/98-A 19981002 [1998DE-6003453]

PR - US 60670/97-P 19971002 [1997US-P060670] US 120905/98-A 19980722 [1998US-0120905]

WO 9820728/98(US)-W 19981002 [1998WO-US20728]

IC - A23B-007/04; A23B-007/10; A23B-007/154; A23B-007/157

1/2 LEGALI - ©LEGSTAT

PN - DE 69803453 [DE69803453]

DT - DE-P

ACTE - 20020228 DE/REF-P

CORRESPONDS TO

(EP 983004 20020228 [EP-983004])

UP - 2002-09

2/2 LEGALI - ©LEGSTAT

PN - EP 983004 [EP-983004]

AP - EP 98950857/98 19981002 [1998EP-0950857]

DT - EP-P

ACTE - 19981002 EP/AE-A

EP-APPLICATION

EP 98950857/98 19981002 [1998EP-0950857]

20000308 EP/AK-A1 [+]

DESIGNATED CONTRACTING STATES IN AN APPLICATION WITH

SEARCH REPORT:

AT BE CH CY DE DK ES FI FR GB GR IE IT LI LU MC NL PT SE

20000308 EP/AK-A4 [+]
DESIGNATED CONTRACTING STATES MENTIONED IN A
SUPPLEMENTARY SEARCH REPORT:
AT BE CH CY DE DK ES FI FR GB GR IE IT LI LU MC NL PT SE

20000308 EP/A1 [+]
PUBLICATION OF APPLICATION WITH SEARCH REPORT

20000308 EP/A4 [+] SUPPLEMENTARY SEARCH REPORT 20000111

20000308 EP/17P [+] REQUEST FOR EXAMINATION FILED 19991220

20010404 EP/RTI1 TITLE (CORRECTION) METHOD FOR PRESERVING MUSHROOMS

20010425 EP/RTI1 TITLE (CORRECTION) METHOD FOR PRESERVING MUSHROOMS

20010516 EP/RTI1 TITLE (CORRECTION) METHOD FOR PRESERVING MUSHROOMS

20010711 EP/17Q [+] FIRST EXAMINATION REPORT 20010525

20020101 EP/REG; GB/IF02 [+]
GB: EUROPEAN PATENT IN FORCE AS OF 2002-01-01
<GB>

20020102 EP/RIC1 CLASSIFICATION (CORRECTION) 7A 23B 7/04 A, 7A 23B 7/10 B, 7A 23B 7/154 B, 7A 23B 7/157 B

20020102 EP/RIN1 INVENTOR (CORRECTION) BEELMAN, ROBERT B. * DUNCAN, ERIC M. 20020109 EP/AK-B1 [+]
DESIGNATED CONTRACTING STATES MENTIONED IN A PATENT SPECIFICATION:
AT BE CH CY DE DK ES FI FR GB GR IE IT LI LU MC NL PT SE

20020109 EP/B1 [+] PATENT SPECIFICATION

20020109 EP/REF-R [+] IN AUSTRIA REGISTERED AS: (AT 211619 20020115 [ATE211619])

20020115 EP/REG; CH/EP [+] CH: ENTRY IN THE NATIONAL PHASE <CH>

20020206 EP/REG; IE/FG4D IE: EUROPEAN PATENTS GRANTED DESIGNATING IRELAND <IE>

20020228 EP/REF-P CORRESPONDS TO: (DE 69803453 20020228 [DE69803453])

20020715 EP/REG; CH/PL [-] CH: PATENT CEASED <CH>

UP - 2002-29

5/9 INPADOC - ©INPADOC

PN - EP 983004 A1 20000308 [EP-983004]

TI - PRESERVATIVE COMPOSITIONS AND METHODS FOR MUSHROOMS

LA - ENG

IN - BEELMAN ROBERT B [US]; DUNCAN ERIC M [US]

PA - PENN STATE RES FOUND [US]

AP - EP 98950857/98-A 19981002 [1998EP-0950857]

PR - WO 9820728/98(US)-W 19981002 [1998WO-US20728] US 60670/97-P 19971002 [1997US-P060670] US 120905/98-A 19980722 [1998US-0120905]

IC - A23L-003/34; A23B-007/04; A23B-007/10; A23B-007/154; A23B-007/157

DS - AT* BE* CH* CY* DE* DK* ES* FI* FR* GB* GR* IE* IT* LI* LU* MC* NL* PT* SE*

1/2 LEGALI - ©LEGSTAT

PN - DE 69803453 [DE69803453]

DT - DE-P

ACTE - 20020228 DE/REF-P

CORRESPONDS TO

(EP 983004 20020228 [EP-983004])

UP - 2002-09

2/2 LEGALI - ©LEGSTAT

PN - EP 983004 [EP-983004]

AP - EP 98950857/98 19981002 [1998EP-0950857]

DT - EP-P

ACTE - 19981002 EP/AE-A

EP-APPLICATION

EP 98950857/98 19981002 [1998EP-0950857]

20000308 EP/AK-A1 [+]

DESIGNATED CONTRACTING STATES IN AN APPLICATION WITH SEARCH REPORT:

SLARCITALI ORI.

AT BE CH CY DE DK ES FI FR GB GR IE IT LI LU MC NL PT SE

20000308 EP/AK-A4 [+]

DESIGNATED CONTRACTING STATES MENTIONED IN A SUPPLEMENTARY SEARCH REPORT:

AT BE CH CY DE DK ES FI FR GB GR IE IT LI LU MC NL PT SE

20000308 EP/A1 [+]

PUBLICATION OF APPLICATION WITH SEARCH REPORT

20000308 EP/A4 [+]

SUPPLEMENTARY SEARCH REPORT

20000111

20000308 EP/17P [+]

REQUEST FOR EXAMINATION FILED

19991220

20010404 EP/RTI1

TITLE (CORRECTION)

METHOD FOR PRESERVING MUSHROOMS

20010425 EP/RTI1 TITLE (CORRECTION) METHOD FOR PRESERVING MUSHROOMS

20010516 EP/RTI1 TITLE (CORRECTION) METHOD FOR PRESERVING MUSHROOMS

20010711 EP/17Q [+] FIRST EXAMINATION REPORT 20010525

20020101 EP/REG; GB/IF02 [+]
GB: EUROPEAN PATENT IN FORCE AS OF 2002-01-01
<GB>

20020102 EP/RIC1 CLASSIFICATION (CORRECTION) 7A 23B 7/04 A, 7A 23B 7/10 B, 7A 23B 7/154 B, 7A 23B 7/157 B

20020102 EP/RIN1 INVENTOR (CORRECTION) BEELMAN, ROBERT B. * DUNCAN, ERIC M.

20020109 EP/AK-B1 [+]
DESIGNATED CONTRACTING STATES MENTIONED IN A PATENT SPECIFICATION:
AT BE CH CY DE DK ES FI FR GB GR IE IT LI LU MC NL PT SE

20020109 EP/B1 [+]
PATENT SPECIFICATION

20020109 EP/REF-R [+]
IN AUSTRIA REGISTERED AS:
(AT 211619 20020115 [ATE211619])

20020115 EP/REG; CH/EP [+] CH: ENTRY IN THE NATIONAL PHASE <CH>

20020206 EP/REG; IE/FG4D
IE: EUROPEAN PATENTS GRANTED DESIGNATING IRELAND
<IE>

20020228 EP/REF-P CORRESPONDS TO:

(DE 69803453 20020228 [DE69803453])

20020715 EP/REG; CH/PL [-] CH: PATENT CEASED

 $<\!\!\mathrm{CH}\!\!>$

UP - 2002-29

6/9 INPADOC - ©INPADOC

PN - EP 983004 A4 20000308 [EP-983004]

TI - PRESERVATIVE COMPOSITIONS AND METHODS FOR MUSHROOMS

LA - ENG

IN - BEELMAN ROBERT B [US]; DUNCAN ERIC M [US]

PA - PENN STATE RES FOUND [US]

AP - EP 98950857/98-A 19981002 [1998EP-0950857]

PR - WO 9820728/98(US)-W 19981002 [1998WO-US20728] US 60670/97-P 19971002 [1997US-P060670] US 120905/98-A 19980722 [1998US-0120905]

IC - A23L-003/34; A23B-007/04; A23B-007/10; A23B-007/154; A23B-007/157

DS - AT* BE* CH* CY* DE* DK* ES* FI* FR* GB* GR* IE* IT* LI* LU* MC* NL* PT* SE*

1/2 LEGALI - ©LEGSTAT

PN - DE 69803453 [DE69803453]

DT - DE-P

ACTE - 20020228 DE/REF-P

CORRESPONDS TO

(EP 983004 20020228 [EP-983004])

UP - 2002-09

2/2 LEGALI - ©LEGSTAT

PN - EP 983004 [EP-983004]

AP - EP 98950857/98 19981002 [1998EP-0950857]

DT - EP-P

ACTE - 19981002 EP/AE-A

EP-APPLICATION

EP 98950857/98 19981002 [1998EP-0950857]

20000308 EP/AK-A1 [+]
DESIGNATED CONTRACTING STATES IN AN APPLICATION WITH
SEARCH REPORT:
AT BE CH CY DE DK ES FI FR GB GR IE IT LI LU MC NL PT SE

20000308 EP/AK-A4 [+]
DESIGNATED CONTRACTING STATES MENTIONED IN A
SUPPLEMENTARY SEARCH REPORT:
AT BE CH CY DE DK ES FI FR GB GR IE IT LI LU MC NL PT SE

20000308 EP/A1 [+]
PUBLICATION OF APPLICATION WITH SEARCH REPORT

20000308 EP/A4 [+] SUPPLEMENTARY SEARCH REPORT 20000111

20000308 EP/17P [+] REQUEST FOR EXAMINATION FILED 19991220

20010404 EP/RTI1 TITLE (CORRECTION) METHOD FOR PRESERVING MUSHROOMS

20010425 EP/RTI1 TITLE (CORRECTION) METHOD FOR PRESERVING MUSHROOMS

20010516 EP/RTI1 TITLE (CORRECTION) METHOD FOR PRESERVING MUSHROOMS

20010711 EP/17Q [+] FIRST EXAMINATION REPORT 20010525

20020101 EP/REG; GB/IF02 [+]
GB: EUROPEAN PATENT IN FORCE AS OF 2002-01-01
<GB>

20020102 EP/RIC1 CLASSIFICATION (CORRECTION) 7A 23B 7/04 A, 7A 23B 7/10 B, 7A 23B 7/154 B, 7A 23B 7/157 B

20020102 EP/RIN1

INVENTOR (CORRECTION)
BEELMAN, ROBERT B. * DUNCAN, ERIC M.

20020109 EP/AK-B1 [+]
DESIGNATED CONTRACTING STATES MENTIONED IN A PATENT SPECIFICATION:
AT BE CH CY DE DK ES FI FR GB GR IE IT LI LU MC NL PT SE

20020109 EP/B1 [+] PATENT SPECIFICATION

20020109 EP/REF-R [+] IN AUSTRIA REGISTERED AS: (AT 211619 20020115 [ATE211619])

20020115 EP/REG; CH/EP [+] CH: ENTRY IN THE NATIONAL PHASE <CH>

20020206 EP/REG; IE/FG4D IE: EUROPEAN PATENTS GRANTED DESIGNATING IRELAND <IE>

20020228 EP/REF-P CORRESPONDS TO: (DE 69803453 20020228 [DE69803453])

20020715 EP/REG; CH/PL [-] CH: PATENT CEASED <CH>

UP - 2002-29

7/9 INPADOC - ©INPADOC

PN - EP 983004 B1 20020109 [EP-983004]

TI - METHOD FOR PRESERVING MUSHROOMS

LA - ENG

IN - BEELMAN ROBERT B [US]; DUNCAN ERIC M [US]

PA - PENN STATE RES FOUND [US]

AP - EP 98950857/98-A 19981002 [1998EP-0950857]

PR - WO 9820728/98(US)-W 19981002 [1998WO-US20728] US 60670/97-P 19971002 [1997US-P060670] US 120905/98-A 19980722 [1998US-0120905] IC - A23B-007/04; A23B-007/10; A23B-007/154; A23B-007/157

DS - AT* BE* CH* CY* DE* DK* ES* FI* FR* GB* GR* IE* IT* LI* LU* MC*

NL* PT* SE*

1/2 LEGALI - ©LEGSTAT

PN - DE 69803453 [DE69803453]

DT - DE-P

ACTE - 20020228 DE/REF-P

CORRESPONDS TO

(EP 983004 20020228 [EP-983004])

UP - 2002-09

2/2 LEGALI - ©LEGSTAT

PN - EP 983004 [EP-983004]

AP - EP 98950857/98 19981002 [1998EP-0950857]

DT - EP-P

ACTE - 19981002 EP/AE-A

EP-APPLICATION

EP 98950857/98 19981002 [1998EP-0950857]

20000308 EP/AK-A1 [+]

DESIGNATED CONTRACTING STATES IN AN APPLICATION WITH SEARCH REPORT:

AT BE CH CY DE DK ES FI FR GB GR IE IT LI LU MC NL PT SE

20000308 EP/AK-A4 [+]

DESIGNATED CONTRACTING STATES MENTIONED IN A SUPPLEMENTARY SEARCH REPORT:

AT BE CH CY DE DK ES FI FR GB GR IE IT LI LU MC NL PT SE

20000308 EP/A1 [+]

PUBLICATION OF APPLICATION WITH SEARCH REPORT

20000308 EP/A4 [+]

SUPPLEMENTARY SEARCH REPORT

20000111

20000308 EP/17P [+]

REQUEST FOR EXAMINATION FILED

19991220

20010404 EP/RTI1
TITLE (CORRECTION)
METHOD FOR PRESERVING MUSHROOMS

20010425 EP/RTI1 TITLE (CORRECTION) METHOD FOR PRESERVING MUSHROOMS

20010516 EP/RTI1 TITLE (CORRECTION) METHOD FOR PRESERVING MUSHROOMS

20010711 EP/17Q [+] FIRST EXAMINATION REPORT 20010525

20020101 EP/REG; GB/IF02 [+]
GB: EUROPEAN PATENT IN FORCE AS OF 2002-01-01
<GB>

20020102 EP/RIC1 CLASSIFICATION (CORRECTION) 7A 23B 7/04 A, 7A 23B 7/10 B, 7A 23B 7/154 B, 7A 23B 7/157 B

20020102 EP/RIN1 INVENTOR (CORRECTION) BEELMAN, ROBERT B. * DUNCAN, ERIC M.

20020109 EP/AK-B1 [+]
DESIGNATED CONTRACTING STATES MENTIONED IN A PATENT SPECIFICATION:
AT BE CH CY DE DK ES FI FR GB GR IE IT LI LU MC NL PT SE

20020109 EP/B1 [+]
PATENT SPECIFICATION

20020109 EP/REF-R [+] IN AUSTRIA REGISTERED AS: (AT 211619 20020115 [ATE211619])

20020115 EP/REG; CH/EP [+] CH: ENTRY IN THE NATIONAL PHASE <CH>

20020206 EP/REG; IE/FG4D
IE: EUROPEAN PATENTS GRANTED DESIGNATING IRELAND

<IE>

20020228 EP/REF-P CORRESPONDS TO: (DE 69803453 20020228 [DE69803453])

20020715 EP/REG; CH/PL [-] CH: PATENT CEASED

<CH>

UP - 2002-29

8/9 INPADOC - ©INPADOC

PN - US 5919507 A 19990706 [US5919507]

TI - PRESERVATION COMPOSITIONS AND METHODS FOR MUSHROOMS

IN - BEELMAN ROBERT B [US]; DUNCAN ERIC M [US]

PA - PENN STATE RES FOUND [US]

AP - US 120905/98-A 19980722 [1998US-0120905]

PR - US 120905/98-A 19980722 [1998US-0120905] US 60670/97-P 19971002 [1997US-P060670]

IC - A23L-003/34

1/1 LEGALI - ©LEGSTAT

PN - US 5919507 [US5919507]

AP - US 120905/98 19980722 [1998US-0120905]

DT - US-P

ACTE - 19980722 US/AE-A

APPLICATION DATA (PATENT)

US 120905/98 19980722 [1998US-0120905]

19980722 US/AS02

ASSIGNMENT OF ASSIGNOR'S INTEREST

PENN STATE RESEARCH FOUNDATION, THE 304 OLD MAIN

UNIVERSITY PARK, PENNSYLVANIA 1 * BEELMAN, ROBERT B. :

19980630; DUNCAN, ERIC M.: 19980630

19990706 US/A

PATENT

UP - 2000-08

9/9 INPADOC - @INPADOC

PN - WO 9917624 A1 19990415 [WO9917624]

TI - PRESERVATIVE COMPOSITIONS AND METHODS FOR MUSHROOMS

LA - ENG

IN - BEELMAN ROBERT B; DUNCAN ERIC M

PA - PENN STATE RES FOUND [US]

AP - WO 9820728/98(US)-A 19981002 [1998WO-US20728]

PR - US 60670/97-P 19971002 [1997US-P060670] US 120905/98-A 19980722 [1998US-0120905]

IC - A23L-003/34

DS - AU* CA* AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE

1/1 LEGALI - ©LEGSTAT

PN - WO 9917624 [WO9917624]

AP - WO 9820728/98(US) 19981002 [1998WO-US20728]

DT - WO-P

ACTE - 19981002 WO/AE-A

APPLICATION DATA

WO 9820728/98(US) 19981002 [1998WO-US20728]

19990415 WO/AK-A1 [+]

DESIGNATED STATES CITED IN A PUBLISHED APPLICATION WITH SEARCH REPORT

AU CA

19990415 WO/AL-A1 [+]

DESIGNATED COUNTRIES FOR REGIONAL PATENTS CITED IN A PUBLISHED APPLICATION WITH SEARCH REPORT AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE

19990415 WO/A1 [+]

PUBLICATION OF THE INTERNATIONAL APPLICATION WITH THE INTERNATIONAL SEARCH REPORT

19990616 WO/121

EP: PCT APP. ART. 158 (1)

UP - 1999-26

PATNO IS 5919507

DATE: AUGUST 6, 2002

LIBRARY: PATENT FILE: ALL

Your search request is: PATNO IS 5919507

Number of PATENTS found with your search request through: LEVEL $1\dots$ 1

Your search request has found 1 PATENT through Level 1. To DISPLAY this PATENT press either the KWIC, FULL, CITE or SEGMTS key. To MODIFY your search request, press the M key (for MODFY) and then the ENTER key.

For further explanation, press the H key (for HELP) and then the ENTER key.

1. 5919507 , July 6, 1999 , Preservation compositions and methods for mushrooms , Beelman, Robert B., State College, PA; Duncan, Eric M., State College, PA, 00120905, The Penn State Research Foundation, University Park, PA

CORE TERMS: mushroom, erythorbate, high-ph, sulfite, sodium, erythorbic, acid, bacterial, ppm, buffer \dots

LEVEL 1 OF 1 PATENT

UNITED STATES PATENT AND TRADEMARK OFFICE GRANTED PATENT

5919507

<=1> GET 1st DRAWING SHEET OF 20

July 6, 1999

Preservation compositions and methods for mushrooms

APPL-NO: 00120905

FILED-DATE: July 22, 1998

GRANTED-DATE: July 6, 1999

CORE TERMS: mushroom, erythorbate, high-ph, sulfite, sodium, erythorbic, acid,

bacterial, ppm, buffer ...

ENGLISH-ABST:

Preservative compositions using toxicologically acceptable ingredients, and employing a pH of 9.0 or above for at least part of the process, for controlling the growth of spoilage bacteria and for preventing unwanted color changes in fresh and processed mushrooms. Aqueous solutions of preservatives are prepared and applied in multiple stages to the mushrooms, by spraying or immersion. More specifically, disclosed is a method for preserving fresh and processed mushrooms, comprising the steps of: contacting the mushrooms with an antimicrobial buffer solution having a pH of from about 9.5 to about 11.0; and rinsing the mushrooms one or more times immediately after the contacting step with pH-neutralizing buffer solutions of erythorbic acid and sodium erythorbate, in ratios of about 1:4, with a sufficient pH to return the mushrooms to the mushroom physiological pH of about 6.5.

5919507 OR 5,919,507

Your search request has found no CASES.

To edit the above request, use the arrow keys. Be sure to move the cursor to the end of the request before you enter it.

To enter a new search request, type it and press the ENTER key.

What you enter will be Search Level 1.

For further explanation, press the H key (for HELP) and then the ENTER key.